

Machine Learning Model - Segment 3

- Working Code Link:
https://github.com/skotagiri95/Oil-and-Dollar-Value-Analysis-/tree/master/LINEAR%20REGRESSION_OIL
- In week 3 utilized week by week comparison of oil and gas prices instead of monthly comparison. This change was made to allow the data to be clear and concise. The dataset went from 10,964 to 834.
- Oil is independent variable and gas price is the dependent variable. The formula utilized P-value: <0.0001 , Equation: $\text{Gas Price (\$)} = 0.0212924 * \text{Oil Price (\$)} + 1.50941$

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- Data was split into a 70%-30% datasets. After training and testing the results, the data fell within the actual data versus the prediction.
- The linear regression model works well we you have an dependent value such as gas and independent value such as oil.
- The advantage of linear regression allows for an easy modeling of your dependent and dependent values. The disadvantage is it can only be used with linear data.

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- Will include statistical analysis in the next module.